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| 10/780,598 | 02/19/2004 | Jun Ogawa | 1046.1305 | 3384 |
| 21171 | 7590 | 10/29/2007 | EXAMINER | |
| STAAS & HALSEY LLP | | | RICHARDSON, THOMAS W | |
| SUITE 700 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|------------------------------|------------------------|---------------------|--|
| | 10/780,598 | OGAWA, JUN | |
| Examiner | Art Unit | | |
| Thomas Richardson | 4121 | | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 19 February 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-21 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 19 February 2004 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 19 February 2004.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
5) Notice of Informal Patent Application
6) Other: ____.

DETAILED ACTION

Claims 1-21 are pending for examination.

Claims 1-21 are rejected.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "packet 100" described on page 39, line 11, does not appear in Figure 8 as stated. Also, "terminal 2" as described on page 70, line 3 does not appear in Figure 14A as stated.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended.

Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

2. Page 5, line 3 contains an apparent misspelling of the address associated with the drawing. It appears as "A.outisde.com" and should be "A.outside.com."

3. Page 21, line 3 contains improper verb form, as it reads "the embodiment will respectively described."

4. Page 21, line 8 contains improper grammar. Specification is unintelligible.

5. Claims 2, 9, and 16 are objected to because of the following informalities: Improper usage of "and" in the first limitation. The claims read, "the query being transmitted from a first network and a second network." Examiner assumes limitation to mean "the query being transmitted from a first network **or** a second network.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 8-10, and 15-27 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6 961 783, Cook et al.

6. As per claims 1, 8, and 15, Cook discloses a name/address translation device, method, and computer program (abstract) comprising:

a judging unit for judging, when receiving a query, transmitted from a communication source, about an address corresponding to a name of a

communication destination, whether a communication between the communication source and a communication destination is permitted or not, on the basis of network types to which the communication source and the communication destination respectively belong (column 5, lines 13-34, where the system maintains an access list giving connectivity information between devices);

a second judging unit for judging based on a result of the judgment by the judging unit whether or not a communication destination address corresponding to the name is given as a response to the communication source (column 5, lines 23-34, where the system access list may require device verification in order to respond with the requested address); and

a response unit for acquiring, when the second judging unit judges that the address of the communication destination is given as the response, the address of the communication destination and giving the address of the communication destination as the response to the communication source (column 5, lines 1-10, where the DNS server resolves the domain name into an IP address).

7. As per claims 2, 9, and 16 Cook discloses a name/address translation device, method, and computer program (abstract) comprising:

a receiving unit for receiving a query about a communication destination address corresponding to a communication destination name, the query being transmitted from a first network and a second network (Figure 4, network interface 54);

an identifying unit for identifying networks to which a communication source having transmitted the query and the communication destination respectively belong (column 5, lines 14-24, where the access list defines the addresses of the communication sources and destinations);

a searching unit for searching for an address of the communication destination to be given to the communication source as a response when the communication source belongs to the first network and when the communication destination belongs to the second network (column 5, lines 1-10, where the DNS server resolves the IP address of the requested domain name); and

a sending unit for sending the response containing the address of the communication destination (Figure 4, network interface 54), wherein the sending unit, when the communication source belongs to the second network and when the communication destination belongs to the first network, does not send the response containing the address of the communication destination (Figure 2, where the DNS request comes from a local DNS server, with the message originating in the local network).

8. As per claims 3, 10, and 17, Cook discloses a name/address translation device, method, and computer program according to Claims 2, 9, and 16, wherein the sending unit, when there is no application of which a use is permitted in a communication between the communication source belonging to the first network and the communication destination belonging to the second network, does not give the response of the communication destination address to the

communication source (column 7, lines 20-22, where the address is not returned if the source is not allowed to access the destination).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4-7, 11-14, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6 961 783, Cook et al as applied to claims 2, 9, and 16 above, and further in view of US 7 093 288, Hydrie et al.

9. As per claims 4, 11, and 18, Cook teaches a name/address translation device according to Claims 2, 9, and 16.

Cook does not teach a system with any type of firewall or packet filtering. Hydrie teaches a system of network communication containing a packet filtering system and method comprising:

notifying unit for notifying a routing device of passage information for letting data pass through that are forwarded between a first terminal and a second terminal, the routing device receiving, when a response of an address of the second terminal corresponding to the communication destination belonging to the second network is given to the first terminal corresponding to the communication source belonging to the first network, pieces of data forwarded between the first network and the second network and letting only the data with its passage permitted pass through, and effecting an address translation between the first network and the second network (column 4, lines 25-40, where the filters are accessed by the controller, and thus the controller becomes aware of the passage rules, and either allows or denies communication between devices).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a method of packet filtering such as that taught by Hydrie in the system of Cook. Packet filtering allows a user to determine whether communication should be allowed between devices based on a desired rule set (Hydrie, abstract). This would have been beneficial in Cook's system, as it would have provided an additional layer of protection to deny communication between devices, which is not allowed by the access list.

10. As per claims 5, 12, and 19, the combination of Cook and Hydrie teaches a name/address translation device, method, and computer program according to Claims 4, 11, and 18.,

wherein the notifying unit, when the routing device lets the data transmitted from the second terminal pass through, notifies the routing device of passage information containing an address of the first network that is virtually assigned to the second terminal and an on-the-second-network address of the second terminal in order to translate the on-the-second-network address of the second terminal that is added as a source address to this piece of data into an on-the-first network address (Hydrie teaches this limitation. Column 4, lines 42-50 show the virtualization data, which includes a map of the virtual devices. This map contains information on the communication source and destination, and also contains translation information for translating the virtual addresses to real addresses), and

the sending unit, when the first terminal adds the on-the-first-network address of the second terminal to the data addressed to the second terminal and thus transmits it and when the routing device lets the data addressed to the second terminal pass through, sends a response containing the one-the-first-network address of the second terminal in order to translate the destination address added to this piece of data into the on-the-second-network address of the second terminal (Hydrie teaches this limitation. Column 4, lines 60-64 show that the network mediator uses the mapped addresses contained in the virtualization data to convert the addresses and forward the communication).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the virtualization system as taught by Nakamura in the system of Cook. This system of virtualizing addresses restricts access between devices (Nakamura, abstract), and would provide an additional layer of protection for the communication between two devices where the communication should be denied.

11. As per claims 6, 13, and 20, the combination of Cook and Hydrie teaches a name/address translation device, method, and computer program according to Claims 4, 11, and 18, wherein the notifying unit notifies the routing device of the passage information further containing information about an application of which the utilization is permitted in the communication between the first terminal and the second terminal in order for the routing device to let only the data pass through which is based on the application of which the utilization is permitted between the first terminal and the second terminal (Hydrie teaches this limitation. Column 6, lines 40-50 show an example of the system working with multiple filters, where one filter restricts the communication between two devices to a particular protocol).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a method of packet filtering such as that taught by Hydrie in the system of Cook. Packet filtering allows a user to determine whether communication should be allowed between devices based on a desired rule set (Hydrie, abstract). This would have been beneficial in Cook's system, as it would have provided an additional layer of protection to deny communication between

devices, which is not allowed by the access list. In particular, restricting access to a particular protocol would provide further security, as even with a connection, a device would not have full control over another device.

12. As per claims 7, 14, and 21, the combination of Cook and Hydrie teaches a name/address translation device, method, and computer program according to any one of Claims 4, 11, and 18, wherein the notifying unit notifies, before the sending unit sends the address of the second terminal, the routing device of the passage information (Hydrie teaches this limitation. Column 4, lines 25-40 show that the passage information is maintained in the filter list, thus providing a stable source of the passage information which can be accessed at any time).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a method of packet filtering such as that taught by Hydrie in the system of Cook. Packet filtering allows a user to determine whether communication should be allowed between devices based on a desired rule set (Hydrie, abstract). This would have been beneficial in Cook's system, as it would have provided an additional layer of protection to deny communication between devices, which is not allowed by the access list.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 7 159 242, Genty et al teaches a system where IPSec tunnels are set up and used through a NAT device.

US 2003/0169766, Ogawa teaches a system that utilizes a DNS server in conjunction with a NAT device.

US 6 480 508, Mwikalo et al teaches a system that utilizes a DNS server, which also acts as a routing agent.

US 7 188 365, Balissat et al teaches a system that utilizes a firewall and packet scanning device along with a DNS server.

US 6 804 783, Wesinger, Jr. et al teaches a system that establishes connectivity between devices and utilizes a firewall to ensure security.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Richardson whose telephone number is (571) 270-5006. The examiner can normally be reached on Monday through Thursday, 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TR



TAGHI ARANI
PRIMARY EXAMINER
10/25/02